



The Agency for Toxic Substances and Disease Registry (ATSDR) is a federal public health agency of the U.S. Department of Health and Human Services. It was created by the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as the Superfund legislation). ATSDR's mission is to serve the public by using the best science, taking responsive public health actions, and providing trusted health information to prevent harmful exposures and disease related to toxic substances.

Spring 2006

Environmental Health

Facts about Testing for Beryllium Sensitization

Purpose

This fact sheet describes a blood testing program being offered by the Agency for Toxic Substances and Disease Registry (ATSDR). This blood test is to determine if you have sensitivity to beryllium.

Beryllium Lymphocyte Proliferation Test (BeLPT)

The name of the test being offered by ATSDR is the beryllium lymphocyte proliferation test (BeLPT). The BeLPT can identify people whose immune system is sensitive to beryllium, a kind of allergic response to beryllium from past exposure.

Who Will Be Offered the Test?

ATSDR plans to offer this test to up to 200 people in the Elmore, Ohio area. The BeLPT will be offered to people who are concerned about past exposure to beryllium if they:

- are household contacts of Brush Wellman workers,
- are workers at machine shops that work with beryllium metals from Brush Wellman or their household contacts,
- live within 1¼ mile of the Brush Wellman facility, or
- have received a diagnosis of sarcoidosis.

Sarcoidosis (a lung disease) and beryllium exposure cause similar changes in the lungs.

How Has the BeLPT Been Used in the Past?

The BeLPT is used at Brush Wellman (Elmore) and other workplaces that process or machine beryllium. The test is used to find out whether workers have been sensitized to beryllium. In this situation, the testing is usually repeated every year or two.

The BeLPT has been used in community settings only a few times. ATSDR was recently involved in testing former workers, household contacts, and residents at another site where beryllium was used. The accuracy under these conditions may be slightly different than in the workplace.

Doctors use this test to find out if persons who appear to have sarcoidosis may actually have chronic beryllium disease (CBD).

About Beryllium Sensitivity (BeS)

BeS, is an immune system response to beryllium exposure. A person can develop beryllium sensitivity soon after exposure or years later. Not all people who are sensitized will develop a beryllium related disease. Most doctors who treat patients with BeS advise those patients to avoid more exposure to beryllium.

Chronic Beryllium Disease (CBD)

CBD develops in some sensitized people who breathe air with low levels of beryllium. CBD may be present when beryllium sensitivity is found or may develop years later. People who have CBD have damage to their lungs. Some symptoms of CBD are cough, shortness of breath, fatigue, fever, night sweats, appetite loss, and weight loss.

Facts about Testing for Beryllium Sensitization

What Will the BeLPT Results Show?

The test should indicate whether or not you are sensitized to beryllium. It does not indicate if you have disease. If you are sensitized to beryllium you may, or may not, develop lung disease.

If you are sensitized to beryllium, you should see a doctor who specializes in lung disease. If you see a doctor for further tests, you or your insurer will have to pay for all costs.

The test has well-known limitations. It does not always identify everyone who is sensitized and occasionally may identify as sensitized someone who is not.

Advantages of the Test

If the test indicates you are not sensitized, your risk of developing CBD is low. If you have BeS, you can take steps that may reduce your risk for CBD.

BeS, CBD, and Sarcoidosis

BeS means that beryllium sensitivity is present, but the lungs are not damaged.

CBD means that beryllium sensitivity and lung damage (scars) are present. The symptoms and progression of the disease (CBD) can be managed, but there is no cure for CBD at this time.

Sarcoidosis is very similar to CBD, but beryllium sensitivity is not present. If your current diagnosis is sarcoidosis, an abnormal blood test may help your doctor to diagnose CBD. Your doctor can plan your treatment better with a more accurate diagnosis.

For More Information

If you would like to speak to someone regarding this testing program, or if you would like to request a test, please call 1-866-577-4258 between the hours of 8 am - 8 pm (EST), Monday through Friday from May 1, 2006 through May 31, 2006. ATSDR has resources to test up to 200 people that may benefit from the testing.



ATSDR
AGENCY FOR TOXIC SUBSTANCES
AND DISEASE REGISTRY